

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: LUMARK

Report Number: P965285

Luminaire Tested: **NAV-SB3D-835-U-T2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P965285
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-3)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3D-835-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3500K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 28761.5 lumens
Efficiency: N/A
Efficacy: 131.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G4

Input Watts (W): 218.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



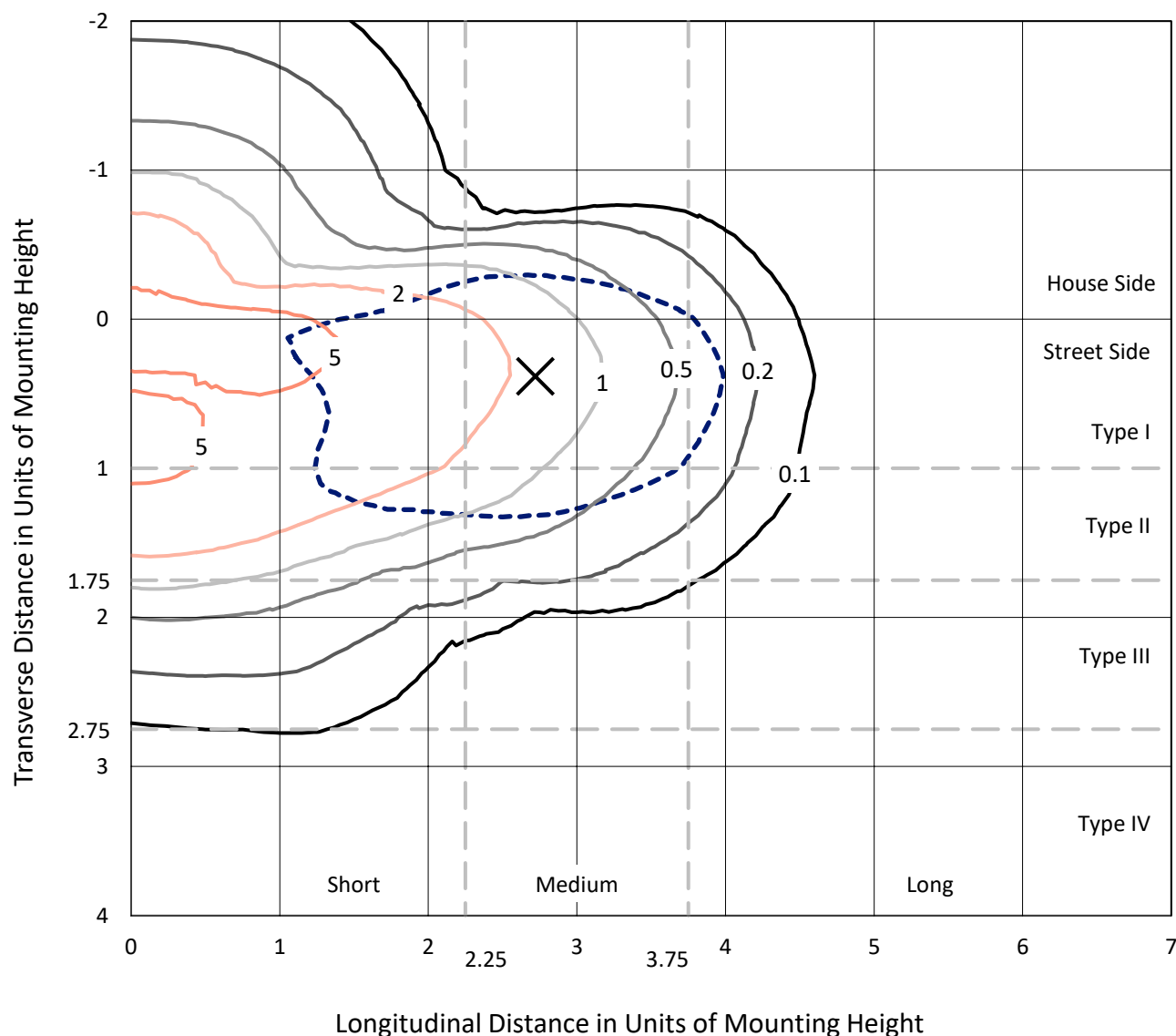
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

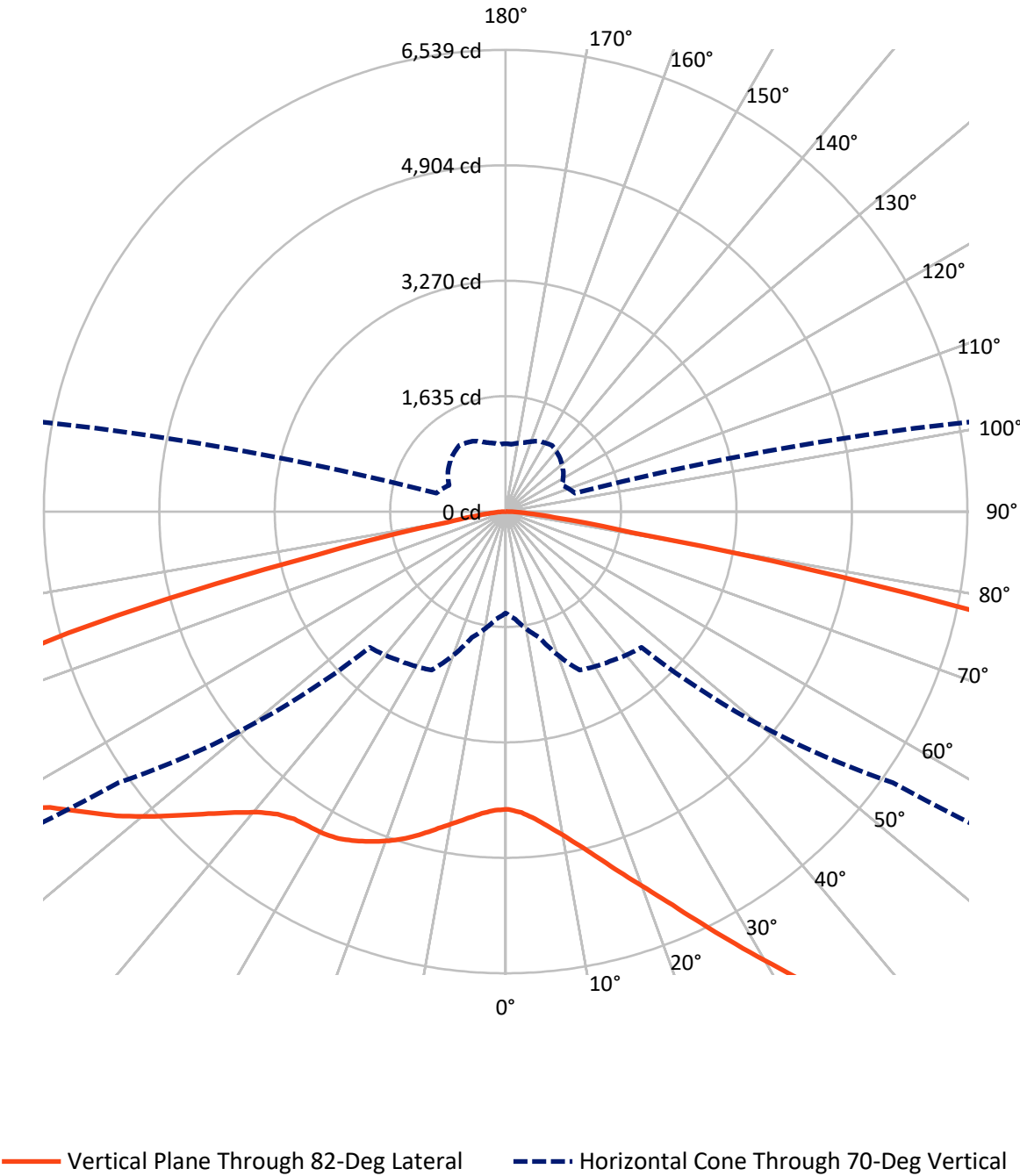
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.7 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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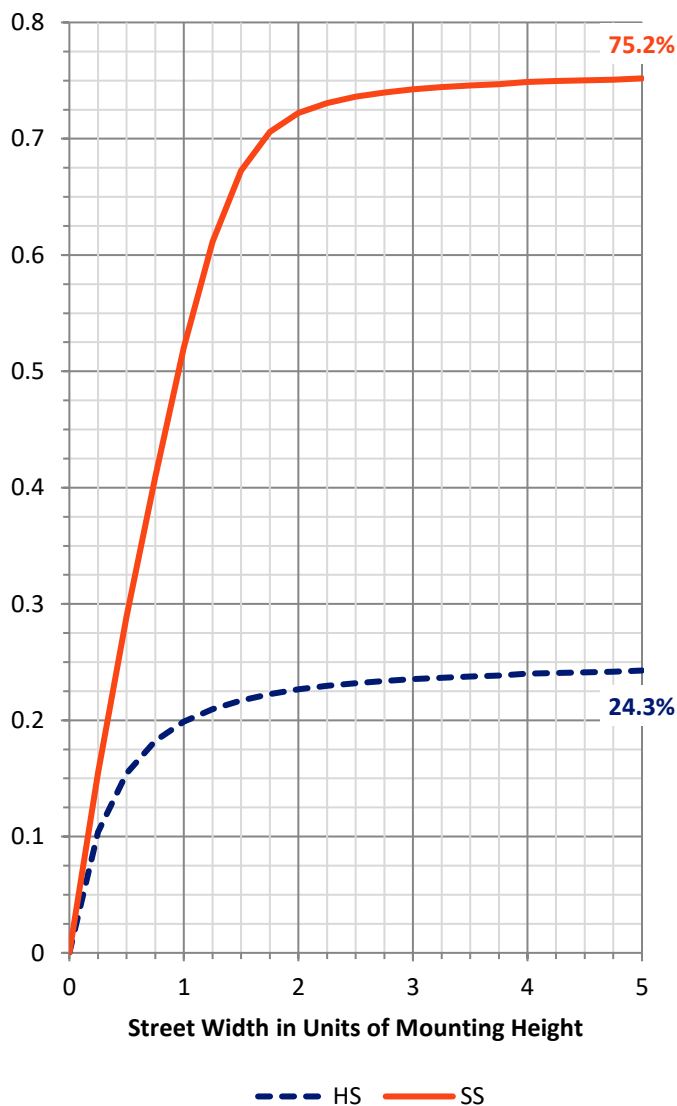
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7090.4	0.0	7090.4
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	21671.1	0.0	21671.1
	% Fixture	75.3	0.0	75.3
Total	Lumens	28761.5	0.0	28761.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	398.1	1.4
10°-20°	1143.9	4.0
20°-30°	1913.6	6.7
30°-40°	2989.5	10.4
40°-50°	4761.2	16.6
50°-60°	6625.8	23.0
60°-70°	6930.8	24.1
70°-80°	3622.4	12.6
80°-90°	376.2	1.3
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	28761.5	100.0
0°-180°	28761.5	100.0

Coefficient of Utilization



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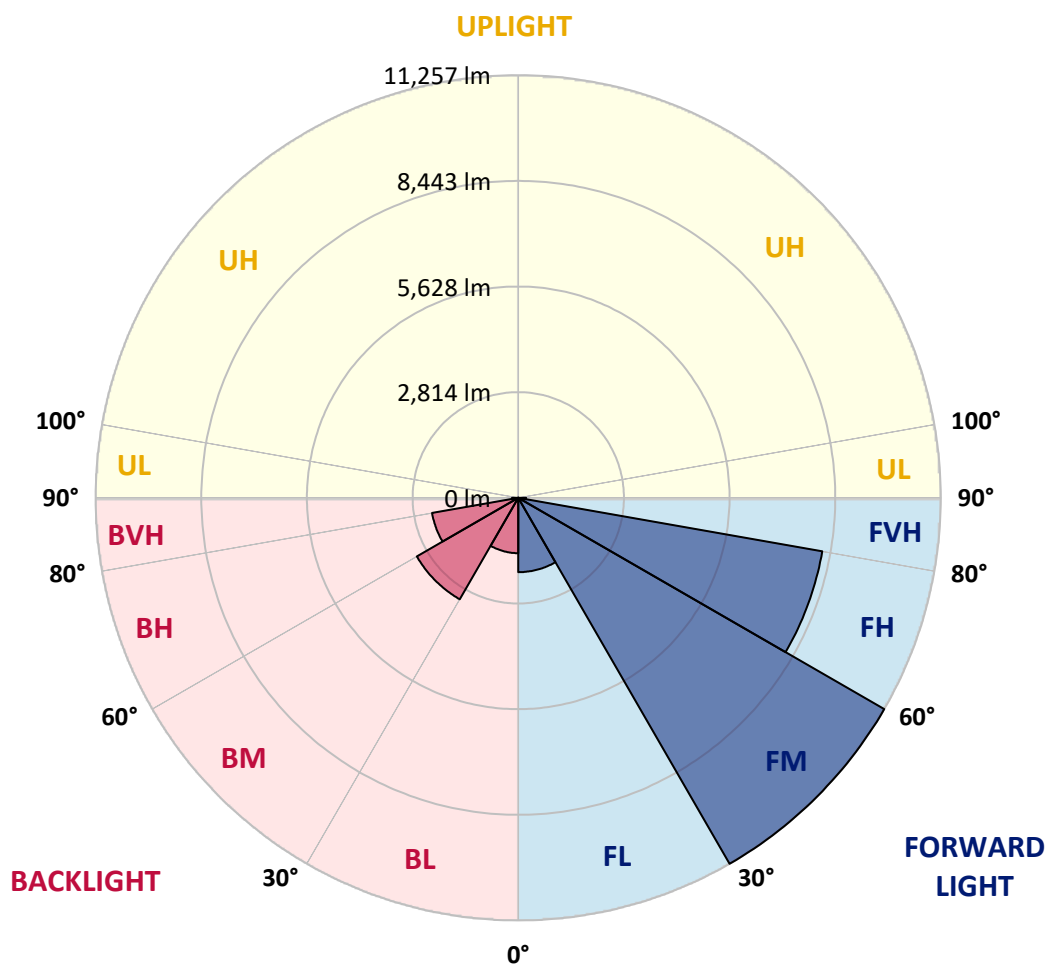
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1980.5	6.9			
FM	(30°-60°)	11257.0	39.1			
FH	(60°-80°)	8223.0	28.6			G4/12000
FVH	(80°-90°)	210.6	0.7			G2/225
BL	(0°-30°)	1475.1	5.1	B3/2500		
BM	(30°-60°)	3119.5	10.8	B3/5000		
BH	(60°-80°)	2330.3	8.1	B3/2500		G3/2500
BVH	(80°-90°)	165.6	0.6			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	4216.7	4216.7	4216.7	4216.7	4216.7	4216.7	4216.7	4216.7	4216.7	4216.7	4216.7
2.5°	4317.5	4341.9	4334.3	4326.7	4326.7	4316.0	4314.4	4299.2	4287.0	4267.2	4262.6
5°	4372.4	4398.4	4395.4	4401.5	4421.3	4425.8	4430.5	4421.3	4396.8	4372.4	4361.8
7.5°	4323.7	4352.7	4361.8	4398.4	4459.5	4514.4	4555.6	4572.4	4549.5	4514.4	4497.6
10°	4158.8	4190.8	4222.9	4309.9	4418.3	4547.9	4657.9	4723.5	4718.9	4685.4	4656.4
12.5°	3824.6	3858.1	3926.8	4096.2	4294.6	4523.5	4728.0	4865.4	4912.7	4888.3	4837.9
15°	3557.5	3586.5	3638.3	3812.4	4070.3	4418.3	4754.1	5021.1	5141.6	5127.9	5066.9
17.5°	3549.9	3562.1	3594.2	3676.6	3874.9	4253.4	4726.6	5173.7	5404.1	5402.7	5326.3
20°	3684.2	3688.8	3707.0	3723.8	3836.8	4128.3	4656.4	5300.4	5698.7	5698.7	5616.3
22.5°	3870.4	3867.3	3885.6	3870.4	3925.3	4117.6	4612.1	5411.8	6026.8	6051.3	5947.5
25°	4149.6	4134.3	4129.8	4094.7	4105.4	4216.7	4660.9	5538.5	6416.0	6466.3	6336.7
27.5°	4522.0	4497.6	4480.8	4399.9	4372.4	4421.3	4810.4	5691.1	6849.5	6936.4	6771.6
30°	5007.3	4963.0	4938.7	4798.2	4699.1	4706.7	5036.3	5894.1	7302.7	7443.1	7234.0
32.5°	5669.7	5601.0	5535.4	5305.0	5123.4	5063.8	5327.8	6174.9	7794.1	8018.5	7749.8
35°	6411.4	6356.4	6286.3	5930.6	5651.4	5514.0	5721.5	6567.1	8369.5	8725.1	8375.6
37.5°	7125.7	7078.3	7112.0	6632.7	6272.6	6072.6	6237.4	7093.6	9079.1	9604.1	9160.0
40°	7864.3	7827.7	7832.3	7374.5	6954.7	6730.4	6863.2	7754.4	9892.6	10649.5	10103.2
42.5°	8667.1	8639.6	8548.1	8142.1	7670.5	7461.4	7583.6	8517.5	10765.6	11840.0	11138.0
45°	9566.0	9549.2	9463.7	8998.3	8458.0	8223.0	8387.8	9360.0	11643.1	12960.2	12177.3
47.5°	10342.9	10356.6	10345.8	9953.7	9393.5	9048.6	9245.5	10239.0	12459.6	14013.3	13173.8
50°	10716.8	10788.4	10893.8	10771.7	10423.7	10072.7	10110.8	11087.6	13238.0	15000.7	14129.2
52.5°	10521.4	10657.2	10944.1	11139.5	11273.8	11200.5	11098.3	11930.1	13970.5	15892.0	15032.8
55°	9793.4	9984.2	10460.3	10931.9	11617.1	12149.8	12284.1	12864.1	14684.8	16676.4	15887.4
57.5°	8467.2	8777.0	9204.3	10158.2	11311.9	12609.1	13666.8	14159.8	15441.7	17514.3	16781.7
60°	6193.2	6608.3	7139.4	8558.8	10243.6	12363.4	14843.5	16149.9	16517.7	18599.3	17946.2
62.5°	3963.5	4219.8	4708.2	6045.1	7981.9	11104.3	15203.6	18637.6	18341.5	20378.8	19692.1
65°	2713.5	2878.3	3325.5	4076.4	5160.0	8265.7	14239.1	20502.5	21238.1	23199.2	22677.3
67.5°	1971.8	2096.9	2478.4	3136.3	3362.1	4891.4	11049.4	20417.1	24053.9	26105.1	25293.1
70°	1437.7	1526.1	1846.6	2478.4	2586.9	2721.2	6693.8	17355.5	23992.9	26877.3	25905.1
72.5°	1065.3	1126.3	1341.5	1923.0	2093.9	1837.5	3313.3	12613.8	20617.0	24310.3	23530.4
75°	770.7	816.5	975.2	1471.2	1675.8	1399.5	1652.8	7371.4	14381.1	17100.7	17238.0
77.5°	589.1	624.2	728.0	1077.5	1341.5	1050.0	1025.6	3391.1	6818.9	6852.4	7237.1
80°	473.1	496.0	552.5	758.5	1028.6	786.0	668.5	1369.0	2155.0	1823.8	1913.8
82.5°	348.0	386.1	467.0	532.6	735.6	541.8	407.4	691.4	819.6	705.1	711.1
85°	198.4	224.4	282.4	381.5	470.1	331.2	233.5	306.8	381.5	312.8	279.3
87.5°	70.2	91.5	99.2	149.5	204.5	137.4	90.0	88.6	125.2	93.1	77.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4216.7	4216.7	4216.7	4216.7	4216.7	4216.7	4216.7	4216.7	4216.7	4216.7	4216.7
2.5°	4247.3	4239.7	4209.2	4168.0	4125.2	4084.0	4070.3	4041.3	4021.5	4010.7	4023.0
5°	4332.8	4308.4	4236.6	4145.1	4049.0	3945.1	3871.8	3804.7	3755.9	3710.1	3728.4
7.5°	4454.9	4412.1	4288.5	4128.3	3957.3	3784.9	3656.7	3559.0	3493.4	3450.7	3459.8
10°	4596.8	4531.2	4341.9	4102.4	3838.3	3591.1	3440.0	3356.1	3314.8	3291.9	3298.0
12.5°	4760.1	4667.0	4396.8	4042.8	3656.7	3374.4	3270.6	3246.2	3247.7	3249.2	3252.2
15°	4961.6	4831.8	4441.1	3913.0	3420.1	3208.0	3189.7	3229.4	3270.6	3290.5	3288.9
17.5°	5189.0	5005.8	4448.8	3699.4	3188.2	3101.1	3159.2	3244.6	3307.2	3334.6	3340.8
20°	5433.1	5182.8	4393.9	3397.3	2997.4	3014.2	3117.9	3227.8	3296.5	3331.7	3340.8
22.5°	5712.4	5372.1	4262.6	3079.8	2841.7	2919.5	3041.7	3148.5	3220.2	3255.3	3264.4
25°	6031.4	5584.2	4056.5	2812.7	2707.4	2812.7	2934.8	3023.3	3081.4	3113.3	3122.6
27.5°	6385.4	5805.5	3781.8	2600.6	2589.9	2702.8	2803.6	2872.3	2902.8	2927.2	2936.3
30°	6741.1	6007.0	3449.1	2440.3	2487.7	2594.5	2666.2	2696.8	2705.9	2710.5	2721.2
32.5°	7125.7	6181.0	3099.6	2307.6	2390.0	2489.2	2532.0	2545.7	2502.9	2473.9	2483.1
35°	7591.2	6367.2	2757.8	2202.2	2293.8	2379.3	2393.1	2380.8	2330.4	2270.9	2274.0
37.5°	8166.5	6599.2	2484.6	2127.5	2203.8	2260.2	2243.4	2240.4	2245.0	2174.7	2179.4
40°	8871.6	6901.3	2284.6	2069.5	2130.6	2142.8	2095.4	2121.3	2144.3	2037.4	2040.5
42.5°	9654.5	7266.1	2158.0	2029.8	2069.5	2040.5	1967.2	1996.2	1993.2	1852.8	1851.3
45°	10452.7	7662.9	2113.8	2000.8	2013.0	1955.0	1874.1	1881.8	1817.6	1690.9	1695.6
47.5°	11246.3	8088.7	2141.2	1976.4	1942.8	1877.2	1814.7	1781.0	1686.4	1591.8	1591.8
50°	12024.7	8535.9	2242.0	1927.5	1846.6	1808.5	1762.7	1703.2	1602.5	1521.6	1515.5
52.5°	12746.5	8986.1	2354.8	1846.6	1726.1	1749.0	1720.0	1651.3	1552.2	1469.7	1471.2
55°	13430.3	9436.3	2399.1	1735.2	1613.1	1697.1	1680.3	1553.6	1434.6	1367.5	1361.3
57.5°	14175.0	9978.1	2350.3	1593.4	1521.6	1637.5	1573.5	1433.1	1364.4	1314.0	1309.4
60°	15206.7	10828.1	2245.0	1417.8	1434.6	1549.1	1439.2	1381.2	1306.4	1249.9	1246.9
62.5°	16920.6	12413.9	2075.6	1243.8	1332.3	1417.8	1375.0	1317.1	1240.8	1185.8	1185.8
65°	19454.0	14617.6	1756.6	1108.0	1217.9	1289.7	1306.4	1248.4	1169.0	1111.0	1114.1
67.5°	21590.7	16000.4	1329.3	995.1	1100.3	1185.8	1233.2	1176.7	1092.8	1036.3	1037.8
70°	21473.1	14996.1	1014.9	883.7	996.6	1083.5	1144.6	1100.3	1010.3	956.9	961.4
72.5°	19072.5	12545.1	821.1	770.7	891.2	976.7	1050.0	1016.4	924.9	873.0	873.0
75°	14011.7	8905.2	656.2	656.2	760.0	865.3	946.2	924.9	840.9	804.3	793.6
77.5°	5906.3	3736.0	514.3	544.9	631.8	743.2	844.0	851.6	778.4	824.1	747.8
80°	1570.4	1030.1	392.3	428.9	496.0	613.6	734.1	731.0	651.7	609.0	566.2
82.5°	598.3	406.0	279.3	302.2	358.6	470.1	581.5	599.8	520.4	450.2	450.2
85°	230.4	173.9	172.5	181.6	209.1	311.3	439.5	454.8	392.3	332.7	343.4
87.5°	59.6	51.9	64.1	61.1	96.1	166.4	251.8	261.0	239.6	138.9	198.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)